mounted to a bottom of the screen, wherein the restrictor further comprises an end wall mounted to an end thereof, the end wall being spaced from the end cap.

8. (Amended) The demineralization fluid treatment system of claim 24, wherein the screen is generally cylindrical, the nozzle further comprising an end cap mounted to a bottom of the screen, and wherein the generally cylindrical wall extends to the end cap.

10. (Amended) The demineralization fluid treatment system of claim 13, wherein the auxiliary restrictor includes a tube positioned within the interior cavity, the at least one orifice being disposed in the wall.

11. (Amended) The demineralization fluid treatment system of claim 10, wherein the auxiliary restrictor further includes a check valve mounted upstream of the tube to permit one-way flow away from the auxiliary orifice.

13. (Amended) The demineralization fluid treatment system of claim 24, wherein each of the nozzles further includes an auxiliary duct, an auxiliary restrictor having at least one auxiliary orifice providing communication between the auxiliary duct and the interior cavity, and wherein the vessel further comprises an auxiliary manifold in communication with the auxiliary duct.

17. (Amended) A process for demineralizing a fluid comprising the steps of:

providing a vessel having an inner chamber containing an ion exchange demineralizing processing medium through which fluid can pass;

introducing the process fluid into the chamber;

providing a manifold including a plurality of nozzles suspended in said demineralizing medium in communication with an outlet, each of the nozzles including an outer screen defining an interior cavity, the screen having a plurality of screen openings having a collective screen opening area, a duct, and a hollow flow restrictor disposed in said

interior cavity having at least one orifice providing fluid communication between the duct and the interior cavity, said least one orifice being positioned generally within the interior cavity and having a collective orifice area less than the screen opening area; and

drawing process fluid through the at least one orifice of said restrictor during processing for creating a pressure differential across said at least one restrictor opening such that a distinct directional flow of said fluid is caused through said at least one orifice and in said internal cavity.

Add the following new claims 24-31:

24. (New) A demineralization fluid treatment system comprising:

a vessel, a granular ion exchange demineralizing processing medium located in at least a lower portion of the vessel;

a first manifold for introducing fluid into the vessel; and

a second manifold for withdrawing fluid from the medium, said second manifold including a fluid exit duct, and a plurality of nozzles suspended in the demineralizing medium, said nozzles each being in communication with the fluid exit duct, said nozzles each having an external screen defining an internal cavity, said screen having a plurality of screen openings immersed in said demineralizing processing medium defining a collective exterior open area communicating with said internal cavity, a flow restrictor in the form of a hollow conduit within said interior cavity, said flow restrictor having at least one orifice formed in a wall thereof for permitting communication of fluid between said internal cavity and said duct, and said at lease one orifice collectively having a total orifice area less than the collective open area of such screen such that during operation of the treatment system the fluid flow rate through the nozzle is controlled by said restrictor and a pressure differential created across the at least one orifice is sufficient for generating a directional fluid flow in said internal cavity and through the at least one orifice.

25. (New) The demineralization fluid treatment system of claim 24 in which said nozzles are suspended in closely spaced relation to a bottom of said vessel.